

## ABSTRACT

# APPARATUS FOR CONTROLLING MODULATION OF AN ALTERNATING WAVEFORM ON A DC VOLTAGE SIGNAL WITHIN A LOW-NOISE BLOCK CONTROLLER

An apparatus for controlling modulation of an alternating waveform on a direct current (DC) voltage signal within a low-noise block (LNB) controller is disclosed. The apparatus includes a DC power supply and a mixing/switching circuit. The DC power supply provides a steady DC voltage to a load, such as an LNB amplifier. The mixing/switching circuit adds a modulating signal to the DC voltage and selectively allows the modulated DC voltage to the load. The mixing/switching circuit includes a common control signal input for managing both of the above-mentioned two functions.